

L12 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS

AN 1985:601568 CAPLUS

DN 103:201568

TI Search for singlet oxygen in the decomposition of hydrogen peroxide by mineral compounds in aqueous solutions

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SO J. Am. Chem. Soc. (1985), 107(21), 5844-9

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DT Journal

LA English

AB The possibility of **singlet oxygen** (102) occurrence in the decompn. of H2O2 by mineral compds. in aq. basic solns. was examd. Tetra-K rubrene-2,3,8,9-tetracarboxylate was used as a trap, giving an endoperoxide detected by HPLC. Four families of mineral compds. lead to the formation of the endoperoxide: (1) the **oxides** of the alk. earths Ca, Sr, and Ba; (2) the derivs. of elements of Group 3A, 4A, 5A, and 6A in d.degree. configuration (except Nb); (3) the **oxides** of actinides and **lanthanides**; and (4) the **oxidizers** ClO-, BrO-, Au3+, IO3-, and IO4-. One compd. in each family was selected for further investigation in order to strengthen the 102 hypothesis. Thus, the yield of the endoperoxide of tetra-K 9,10-diphenylanthracene-2,3,6,7-tetracarboxylate was enhanced when the parent compd. was introduced in a mixt. of H2O2 + (ClO-, Nd2O3, MoO42-, Ca(OH)2) + D2O instead of H2O.

L12 ANSWER 2 OF 5 USPATFULL

AN 2001:158517 USPATFULL

TI Azulenyl nitron spin trapping agents, methods of making and using same

IN Becker, David Alan, Ft. Lauderdale, FL, United States

PA Florida International University, Miami, FL, United States (U.S. corporation)

PI US 6291702 B1 20010918

AI US 2000-500228 20000208 (9)

RLI Continuation of Ser. No. US 1998-85170, filed on 28 May 1998, now patented, Pat. No. US 6197825 Division of Ser. No. US 1997-944042,

filed on 4 Sep 1997, now patented, Pat. No. US 6083988 Continuation of Ser. No. WO 1996-US18570, filed on 15 Nov 1996

PRAI US 1996-24631 19960827 (60)

US 1995-6949 19951117 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: O'Sullivan, Peter

LREP Pepper Hamilton LLP, Villacorta, G. M., Pouliquen, C. M.

CLMN Number of Claims: 4

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1919

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to chromotropic nitron spin trapping agents, methods of making these agents, compositions comprising same, and methods of their use. In particular, azulenyl nitrones of the present invention are effective agents for trapping free radical species

and find use as efficient antioxidants in physicochemical and biological

systems. Accordingly, the invention also relates to spin adducts formed from the combination of azulenyl nitrones with free radicals. The compounds of the present invention are readily prepared from available

starting materials and find further use in assays and in a number of diagnostic, prophylactic and therapeutic applications, including but not limited to the alleviation, modulation and inhibition of the negative effects of carbon-centered or oxygen-centered radical species and other products of oxidation. Moreover, the combination adducts may be colorimetrically detected and, optionally, isolated and characterized to obtain valuable information (e.g., structural and the like) about the original reactive free radical species.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 3 OF 5 USPATFULL  
 AN 2001:33321 USPATFULL  
 TI Azulenyl nitron spin trapping agents, methods of making and using same  
 IN Becker, David Alan, Ft. Lauderdale, FL, United States  
 PA Florida International University, Miami, FL, United States (U.S. corporation)  
 PI US 6197825 B1 20010306  
 AI US 1998-85170 19980528 (9)  
 RLI Division of Ser. No. US 1997-944042, filed on 9 Apr 1997 Continuation of Ser. No. WO 1996-US18570, filed on 15 Nov 1996  
 PRAI US 1996-6949 19961115 (60)  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: O'Sullivan, Peter  
 LREP Villacorta, Gilberto M.  
 CLMN Number of Claims: 5  
 ECL Exemplary Claim: 1  
 DRWN 2 Drawing Figure(s); 1 Drawing Page(s)  
 LN.CNT 1985

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to chromotropic nitron spin trapping agents, methods of making these agents, compositions comprising same, and methods of their use. In particular, azulenyl nitrones of the present invention are effective agents for trapping free radical species and find use as efficient antioxidants in physicochemical and biological systems. Accordingly, the invention also relates to spin adducts formed from the combination of azulenyl nitrones with free radicals. The compounds of the present invention are readily prepared from available starting materials and find further use in assays and in a number of diagnostic, prophylactic and therapeutic applications, including but not limited to the alleviation, modulation and inhibition of the negative effects of carbon-centered or oxygen-centered radical species and other products of oxidation. Moreover, the combination adducts may be calorimetrically detected and, optionally, isolated and characterized to obtain valuable information (e.g., structural and the like) about the original reactive free radical species.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 4 OF 5 USPATFULL  
 AN 2000:149934 USPATFULL  
 TI Chemiluminescent compositions and their use in the detection of hydrogen

peroxide  
IN Ullman, Edwin F., Atherton, CA, United States  
Singh, Sharat, San Jose, CA, United States  
PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)  
PI US 6143514 20001107  
AI US 1997-850026 19970501 (8)  
PRAI US 1996-17075 19960501 (60)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Ceperley, Mary E.  
LREP Gattari, Patrick G  
CLMN Number of Claims: 47  
ECL Exemplary Claim: 12  
DRWN No Drawings  
LN.CNT 2261

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits are disclosed. The compositions comprise a matrix having incorporated therein a label capable of being modified by singlet oxygen. A catalyst capable of catalyzing the formation of singlet oxygen is bound to the matrix, which permits the diffusion of singlet oxygen therein. The compositions may be used in methods for detecting hydrogen peroxide or a compound capable of generating hydrogen peroxide. A sample suspected of containing such compound is combined with a composition in accordance with the present invention. The combination is subjected to conditions wherein such compound generates hydrogen peroxide. The reaction of singlet oxygen with the label is determined, the reaction thereof indicating the presence of the compound capable of generating hydrogen peroxide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 5 OF 5 USPATFULL  
AN 2000:84325 USPATFULL  
TI Azulenyl nitron spin trapping agents, methods of making and using same  
IN Becker, David Alan, 2015 SW. 25th Ter., Ft. Lauderdale, FL, United States 33312  
PI US 6083988 20000704  
AI US 1997-944042 19970904 (8)  
RLI Continuation of Ser. No. WO 1996-US18570, filed on 15 Nov 1996  
PRAI US 1995-6949 19951117 (60)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: O'Sullivan, Peter  
LREP Hamilton LLP, Pepper  
CLMN Number of Claims: 32  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)  
LN.CNT 2100

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to chromotropic nitron spin trapping agents, methods of making these agents, compositions comprising same, and methods of their use. In particular, azulenyl nitrones of the present invention are effective agents for trapping free radical species and find use as efficient antioxidants in physicochemical and biological systems. Accordingly, the invention also relates to spin adducts formed

from the combination of azulenyl nitrones with free radicals. The compounds of the present invention are readily prepared from available starting materials and find further use in assays and in a number of diagnostic, prophylactic and therapeutic applications, including but not limited to the alleviation, modulation and inhibition of the negative effects of carbon-centered or oxygen-centered radical species and other products of oxidation. Moreover, the combination adducts may be calorimetrically detected and, optionally, isolated and characterized to obtain valuable information (e.g., structural and the like) about the original reactive free radical species.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 15:27:47 ON 04 FEB 2002)

FILE 'CAPLUS, USPATFULL' ENTERED AT 15:30:48 ON 04 FEB 2002

L1	8570 S SINGLET OXYGEN
L2	28 S L1 AND LANTHANIDES
L3	22 S L2 AND LANTHANUM
L4	0 S L3 AND H2O2
L5	22 S L3 AND OXIDATION
L6	1 S L5 AND HYDROGEN PEROXIDE
L7	1 S L5 AND PEROXIDE
L8	22 S L5 AND ALCOHOL
L9	259 S OXIDATION OF ORGANIC SUBSTRATES
L10	0 S L9 AND LANTHANUM
L11	1 S L9 AND LANTHANIDES
L12	5 S SINGLET OXYGEN (P) LANTHAN? (P) OXID?

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